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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,542	12/10/2004	Andrei Mijiritskii	NL 020565	5664
24737	7590	03/15/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			KAYRISH, MATTHEW	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/517,542

Applicant(s)

MIJIRITSKII ET AL.

Examiner

Matthew G. Kayrish

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kitaura (US Publication Number 2002/0122366).
3. Regarding claim 1, Kitaura et al disclose:

An optical data storage medium for at least read out using a focused radiation beam with a wavelength λ (figure 1, item 5) and a Numerical Aperture (NA) (figure 1, item 6), entering through an entrance face of the medium during read out (figure 1, item 1), comprising at least:

A substrate (figure 1, item 4) with present on a side thereof:

A first stack of layers named L0 (figure 4, items 9 & 40) comprising a first information layer (figure 4, item 40), a radiation beam transparent cover layer adjacent the entrance face (figure 4, item 1), a transmission stack named TS0 with a thickness d_{TS0} and containing all layers between L0 and the entrance face (figure 4, a collection of items 1, 4, 9, 10, 20, 30 and 40. 40 is L0, 1 is the entrance face, TS0 consists of everything

inbetween), characterized in that the maximum deviation of d_{TS0} from respectively the average values of d_{TS0} of a predetermined area of the medium does not exceed a predetermined value $DEVd_{TS0}$, measured over the information area of the medium (page 4, paragraph 50).

4. Regarding claim 2, Kitaura et al disclose:

An optical data storage medium according to claim 1, wherein $DEVd_{TS0} = \pm 3\mu m$ (page 4, paragraph 50).

5. Regarding claim 3, Kitaura et al disclose:

An optical data storage medium according to claim 1, with at least one further stack of layers named L_n and n an integer ≥ 1 (figure 4, a collection of items 1, 4, 9, 10, 20, 30 and 40. 30 is L_1 , 20 is L_2 , 10 is L_3 , 1 is the entrance face, TS_n consists of these three information layers and each of the corresponding separation layers, item 9), L_n comprising a further information layer (figure 4, information layers are items 10, 20 and 30) and being present at a position closer to the entrance face than L_0 (See figure 4), a radiation beam transparent spacer layer between each of L_0 to L_n (figure 4, item 9), and a transmission stack named TS_n with a thickness d_{TSn} and containing all layers between L_n and the entrance face (See figure 4), wherein the maximum deviation of d_{TSn} does not exceed a predetermined value $DEVd_{TSn}$ (page 4, paragraph 50), measured over the information area of the medium (page 4, paragraph 50).

6. Regarding claim 4, Kitaura et al disclose:

An optical data storage medium according to claim 3, wherein $DEVd_{TSn} = \pm 3\mu m$ (page 4, paragraph 50).

7. Regarding claim 5, Kitaura et al disclose:

An optical data storage medium according to claim 1, wherein $DEVd_{TS0} = \pm 2\mu m$
(page 4, paragraph 50).

8. Regarding claim 7, Kitaura et al disclose:

Use of an optical data storage medium as claimed in claim 1 for reliable data read
out from at least one information layer (page 3, paragraph 36).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness
rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the
manner in which the invention was made.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitaura, in view of
Maeda (US Patent Number 6667947).

11. Regarding claim 6, Kitaura et al disclose:

An optical data storage medium according to claim 3, wherein only one further
stack of layers named L1 is present, comprising a further information layer,
 $DEVd_{TS0} = \pm 2\mu m$ (page 4, paragraph 50) and $DEVd_{TS1} = \pm 2\mu m$ (page 4, paragraph 50),
Kitaura et al fails to disclose:

An optical data storage medium according to claim 3, wherein λ is in the range
400 nm-410 nm and NA is in the range 0.84-0.86.

Maeda et al disclose:

An optical data storage medium according to claim 3, wherein λ is in the range 400 nm-410 nm (column 4, lines 12-15) and NA is in the range 0.84-0.86 (column 5, lines 12-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Kitaura with a laser beam of λ in the range 400 nm-410 nm and an objective lens with NA in the range 0.84-0.86 since these are widely used in the art of optical medium read out.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1 and 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claims 1 and 3 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

15. The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

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16. Regarding claims 1 and 3, the applicant et al disclose:

$DEV_{d_{TS0}}$ (Claim 1) and $DEV_{d_{TSn}}$ (Claim 3) is set in dependency of λ and NA.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Greco Kayrish

2/6/2006

MK



2/21/2006



TAN DINH
PRIMARY EXAMINER
2/21/06